

Crab Creek water quality improvement plan: Minutes for 1st Residential and Agricultural Workgroup Meeting. Montgomery County Government Center Nov. 12, 2013, 7:00-9:00pm

Note: following the minutes is a summary of the tour of the upper Crab Creek watershed that preceded the public meeting.

Attendees:

Julio Stephens, Radford University/Nat.
Comm. for the New River (NCNR)
Brent Noell, Farm Service Agency (FSA)
Hunter Musser, NRCS
Roy Nester, Town of Christiansburg (TOC)
David Sutphin, TOC
Jim Lancianese, TOC
John Burke, Gay and Neel, Inc.
Cynthia Hancock, Skyline SWCD

Asa Spiller, VT- Save our Streams Program
Ashley Parks, VDOT contract env. engineer
Courtney Wait, NCNR
Jane Argentina, citizen
Diana Hackenburg, DEQ
Patrick Lizon, DEQ
Karen Kline, VT
Brian Benham, VT
Stacy Horton, DCR

A public meeting presentation was given about the planning process for the TMDL Implementation Plan (IP). water quality improvement planning process for Crab Creek after which attendees split into an agricultural workgroup and a residential/urban workgroup. Group discussions were facilitated by DEQ staff with the aid of agricultural and residential handouts provided by DEQ.

Residential/Urban Source Sector Discussion Summary:

- Diana Hackenburg, Department of Environmental Quality, welcomed everyone, and attendees introduced themselves. Diana provided a Residential Work Group Handout, delivered a brief overview of the meeting purpose, and described the role of the Residential Work Group.
- The Town of Christiansburg is aware of the sewer overflows and is working on the problem per Roy Nester, Project Manager in Christiansburg's Engineering Department. The Town is in the process of replacing older systems. The Town has information on all sewer lines either on paper or on GIS files.
- There are very few houses within the Town limits that are on septic systems in areas where sewer connections are available. According to Town ordinance, if a septic system is failing and a sewer connection is available, the homeowner has to connect to the sewer system.
- Julio Stephens, a member of the National Committee for the New River (NCNR) and a former employee at the Virginia Department of Health (VDH), mentioned that the cost estimates listed for septic system repair and replacement in Table 9 may be low. He recommended contacting local septic contractors to get more accurate numbers for this area. Mr. Stephens also recommended inviting local septic contractors and VDH to participate in the Crab Creek water quality improvement efforts.

- Education and outreach will be an important component of the reducing bacteria from pet waste in the watershed. It was also suggested that the Huckleberry Trail would be a good place for educational materials. It was suggested that Town and Country Veterinary Clinic and Dr. Young's on N. Franklin Street could be contacted to find how they dispose of animal waste.
- Extensive runoff is occurring on the VDOT facility on Cambria Street. Ashley Parks, an environmental engineer at EEE Consulting, Inc. representing VDOT, said that a storm water evaluation was performed about six months ago. She'll talk with the manager at the facility about the problem. It was suggested that mud could be washing off of the machinery at the site.
- The Christiansburg Livestock Market could be a potential site for BMPs.
- Rainwater harvesting and rain gardens are suggested BMPs. Courtney Wait, NCNR, recommended rain gardens as a good educational tool. Montgomery County Public Schools should be contacted about developing rain gardens at some of the schools in Christiansburg.
- Ms. Hackenburg asked if the Save Our Streams (SOS) program is still active in the area. Asa Spiller noted that some monitoring in Crab Creek is planned soon.
- Mr. Spiller asked if the residents of the Crab Creek watershed are open to IP development. The reply was that based on the low attendance at Christiansburg public meetings, most residents are uninformed and uninterested in what is happening regarding water quality improvements. Jane Argentina, a resident, suggested finding some way to get the word out to people about the IP. Mr. Nester recommended informing Town residents through the Town's public relations office. Another suggestion was to use Christiansburg's Facebook page. Another idea was to contact Oak Tree Townhomes and other homeowners associations in the watershed.
- Ms. Hackenburg asked if anyone in the watershed was already providing watershed education. The Town does as a requirement for the MS4s, and the Skyline Soil and Water Conservation District (Cynthia Hancock) works with schools.
- The Diamond Hills Park Stream Restoration Project will begin this winter. This would be a good location for sign(s) with educational information.
- Funding is dependent on stakeholders getting involved. The stakeholders are the ones that will have to carry this IP forward. Mr. Nester noted that a jurisdiction with MS4s cannot apply for CWA Section 319 grants. However, individuals not associated with the MS4s can apply. There is no obvious opposition to the practices promoted by an IP; only thing to note is that Christiansburg is a business and industry friendly community.
- Ms. Wait offered that NCNR could look into working with Christiansburg High School to monitor *E. coli* at the stream restoration project. Mr. Spiller suggested that SOS volunteers may also be able to do some bug sampling with the students. Ms. Hackenburg noted that both of these ideas are valuable since a monitoring strategy is part of the IP.

Agricultural Source Sector Discussion Summary:

- Patrick Lizon, Department of Environmental Quality, welcomed everyone, and attendees introduced themselves. The discussion focused upon information and information needs identified within an Agricultural Work Group Handout provided by DEQ.
- The SWCD and NRCS noted that there are no longer any dairies in the watershed.
- The SWCD indicated that land use conversion may have occurred at a greater rate than projected in the TMDL. It was suggested that land use acreages be checked using GIS.
- Montgomery County has agricultural land zoning with certain protections against subdivision of zoned ag. lands. Agricultural lands must be registered with the county in order to receive zoning protections.
- The Skyline SWCD District is successful at spending funding and very busy since they cover four counties.
- Allowing landowners to opt for livestock exclusion with reduced buffers (10 feet) would increase participation in the livestock exclusion cost-share practices through VA Agricultural cost-share program.
- For SL-6 practices, 100% cost-share is supposed to continue through program year PY2015. Sign-ups before the end of PY2015 will be funded eventually even if it takes several years before they receive a high enough ranking to fund through the SWCD.
- A need for greater consistency in the agricultural cost-share program was expressed. A lack of consistency in the program reduces interest by farmers. For example, the transition from 75% state cost-share to 100% on SL-6 and SL-6T practices and associated restrictions created frustration in the agricultural community.
- In terms of generating participation in the cost-share program, cold calls to farmers have a low rate of success, may be necessary to achieve a sufficient level of participation in the Crab creek watershed.
- There are probably many hobby farm properties in the watershed that contribute to bacteria loads. However, these properties tend to fall through the cracks. For example, VACS & NRCS practices require that stream water be replaced with an alternative water source. On some hobby farms there are no streams, so they are not eligible for cost-share practices, even if they are close enough to a stream that run-off from the property goes into a ditch which goes into a stream.
- Besides livestock exclusion systems, conversion of erodible pasture to forest, critical area treatment, cover crops are two practices that may receive participation and therefore help meet water quality goals in the watershed.

- In regards to the 3 biosolids land application sites in the watershed, the land application permit requires a nutrient management plan which includes practices that are supposed to prevent biosolids from reaching streams via run-off.
- It was pointed out that stream bank erosion is estimated to be the primary source of the excess sediment load to Crab Creek. The NRCS engineering job approval coverage for SWCD projects was recently revoked. This affects stream bank stabilization projects that require significant engineering work. There has been a move to get have engineering job approval for SWCDs covered under an engineer from VT, but until the new system is up and running stabilization efforts may be substantially hindered. However, stabilization projects that are more simple such as planting willows requires less approval to be authorized and therefore will be relatively unaffected by the engineering job approval change.
- The SWCD will try to find some farmers in the watershed who may be willing to attend the next agricultural workgroup.
- The SWCD will come up with cost estimates for the agricultural cost-share practices in the ag. handout and provide the information by the government workgroup mtg. or the next ag workgroup mtg.

Upper Crab Creek Watershed Tour Notes- 11/12/2013

Attendees: Roy Nester; Courtney Wait; Karen Kline; Diana Hackenburg; Patrick Lizon

- There is a Contech filtration unit @ O'Reilly's; the manufacturer estimates a 65% P removal for the system.
- New construction or re-development is required to use the DCR/DEQ storm water manual for BMP's
- The Town of Christiansburg uses the manufacturer estimates for pollutant removal and approves BMPs based on their phosphorous removal efficiency.
- An eroding hillslope was noted between O'Reilly's and a newer housing development atop the hill. E&S permits are required for construction sites greater than 10,000 ft². If erosion begins after the successful permit closure, the town does not have authority under E & S regulations to require additional erosion control.
- Some VDOT interstate storm water runoff goes into the Crab Creek watershed; Roy doesn't know where their stormwater controls are located
- Near Interstate Exit 117 and adjacent to an industrial complex (where backcountry.com warehouse is located) there are large stormwater wetlands that were created for water quantity control but have been subsequently retrofitted for water quality control
- There's a large farm pond on the south side of the interstate near exit 117 but not much is known about its influence on downstream water quality.

- The vast majority of houses in the Crab creek watershed in Christiansburg are on sewer; if sewer is available home owners have to connect once system fails; it's roughly \$2,000 - \$3,000 to connect to sewer. Roy will check on getting GIS sewer layer.
- Industrial Park where New River Center for Energy... is located. This was just outside of the Crab Creek watershed. A 2 pond stormwater control system that is town owned; addresses quality and quantity; this system exceeds design specifications for the large industrial park it services.
- The railroad yard in town near the Cambria train station is a potentially large source of sediment; The Town does not have jurisdiction over runoff from railroads. Nobody knew if the railyard is covered under a stormwater permit, but this should be looked into.
- The Waffle House on Franklin built roughly in 2007 has a water quality treatment system that filters the first flush; run-off exceeding the design inflow bypasses the filtration system.
- Christiansburg does 20-30 annual inspections but wants owners to start participating more in inspections of their own systems.
- The Town is building deep pond in the commercial area by the Waffle house because they are removing a berm lower down the drainage in the Oak Tree subdivision to accommodate a stream restoration project on an (unnamed ?)Crab creek tributary. The stream restoration site (a mitigation project) is on town-owned property in the Oak Hill subdivision. Water and sewer lines are located along the stream, which constrains what can be done with the site. There was a school of small fish in the pool just upstream of the road crossing in the subdivision. Upstream of the road crossing, the Town has a stormwater maintenance easement along the stream, but the owner basically own up to the stream.
- On the edge of the Town limits Crab Creek was visible in a pasture, there was a lot of bank erosion occurring, upstream a little farther there is an old mill dam with a waterfall and a pasture immediately upstream with substantial streambank erosion. In the golf course there was also a lot of bank erosion evident from the road.
- The town owns the property where the original town water works is located along the creek and leases the land for grazing; again bank erosion was evident.
- There is a large auto salvage yard near silver lake road; it was pointed out that it may have a VPDES permit that may not have been in TMDL study.
- Town branch of Crab creek flows under the downtown Christiansburg area; it flows through a viaduct that is roughly 4 foot tall by 10 foot wide;
- There is currently no incentive for commercial businesses to "un-develop" excess impervious areas to better mitigate stormwater, i.e. removing excess parking area and planting vegetation.
- The Town has considered establishing storm water utility, but there are currently no plans to do so.